

Diodes, and Rectifiers



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Automotive-grade diodes

AUTOMOTIVE-GRADE BRIDGE RECTIFIER DIODES

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average Rectified Current	V_F	Reverse Current	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (A)	max (°C)
800 V								
STBR3008-Y	DO-247, H ² PAK-2	1	800	30	1.1	0.002	350	175
STBR6008-Y	DO-247	1	800	60	1.1	0.005	500	175
1200 V								
STBR3012-Y	DO-247, H ² PAK-2	1	1200	30	1.3	0.002	300	175
STBR6012-Y	DO-247	1	1200	60	1.3	0.005	500	175

AUTOMOTIVE-GRADE SCHOTTKY DIODES

Part number	Package	Number of Diodes	Repetitive Peak Reverse Voltage (V_{RRM})	Average Rectified Current (I_D)	Forward Voltage V_F	V_F measure condition (@ I_F)	Reverse Current (I_R)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T _j)
			max (V)	max (A)	max (V)	(A)	max (mA)	max (A)	max (°C)
30 V									
STPS8L30-Y	DPAK	1	30	8	0.4	0.4	1	75	150
STPS6L30C-Y	PowerSO-20	2	30	2 x 30	0.49	30	2	250	150
40 V									
BAT54-Y	SOT-323, SOT23	2	40	0.3	0.24	1	0.001	1	150
STPS0540-Y	SOD-123	1	40	0.5	0.5	0.5	0.04	5.5	150
STPS140-Y	SMA, SMB	1	40	1	0.55	1	0.012	60	150
STPS140Z-Y	SOD-123	1	40	1	0.55	1	0.04	5.5	150
STPS1L40-Y	SMA, SMB, SOD123Flat	1	40	1	0.42	1	0.035	60	150

AUTOMOTIVE-GRADE SCHOTTKY DIODES

Part number	Package	Number of Diodes	Repetitive Peak Reverse Voltage (V_{RRM})	Average Rectified Current (I_D)	Forward Voltage V_f	V_f measure condition (@ I_f)	Reverse Current (I_R)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	max (A)	max (°C)
STPS2L40ZFY	SOD123Flat	1	40	2	0.61	2	0.01	50	175
STPS340-Y	SMB, SMC	1	40	3	0.63	3	0.02	75	150
STPS3L40-Y	SMC	1	40	3	0.5	3	0.1	75	150
STPS640C-Y	DPAK	2	40	2 x 3	0.57	3	0.1	75	150
45 V									
STPS1045B-Y	DPAK	1	45	10	0.63	10	0.1	75	175
STPS1045SFY	PSMC-3L-EP	1	45	10	0.62	10	0.05	210	175
STPS1545-Y	TO-220AC	1	45	15	0.57	15	0.2	220	175
STPS1545C-Y	D ² PAK	2	45	2 x 7.5	0.84	15	0.1	150	175
STPS15L45C-Y	DPAK	2	45	2 x 7.5	0.64	15	1	75	150
STPS2045C-Y	D ² PAK	2	45	2 x 10	0.84	20	0.1	180	175
STPS2545C-Y	D ² PAK	2	45	2 x 12.5	0.84	25	0.125	200	175
STPS3045C-Y	D ² PAK	2	45	2 x 15	0.84	30	0.2	220	175
STPS3045DJF-Y	PowerFLAT 5x6 WF	1	45	30	0.56	30	0.3	380	175
STPS4045C-Y	TO-247	2	45	2 x 20	0.76	20	0.2	220	175
STPS40L45C-Y	D ² PAK	2	45	2 x 20	0.49	20	0.6	230	150
60 V									
STPS160-Y	SMA,SMB	1	60	1	0.57	1	0.004	75	150
STPS1L60-Y	SOD123Flat	1	60	1	0.54	1	0.05	50	175
STPS2L60-Y	SMA	1	60	2	0.55	2	0.1	75	150
STPS2L60ZFY	SOD123Flat	1	60	2	0.66	2	0.05	50	175
STPS360-Y	SOD128Flat	1	60	3	0.58	3	0.15	60	175
STPS3L60-Y	SMC	1	60	3	0.65	3	0.055	75	150
STPS3L60U-Y	SMB	1	60	3	0.62	3	0.15	100	150

AUTOMOTIVE-GRADE SCHOTTKY DIODES

Part number	Package	Number of Diodes	Repetitive Peak Reverse Voltage (V_{RRM})	Average Rectified Current (I_D)	Forward Voltage V_f	V_f measure condition (@ I_f)	Reverse Current (I_R)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	max (A)	max (°C)
STPS560SFY	PSMC-3L-EP	1	60	5	0.43	5	0.05	230	175
STPS5L60-Y	SMC	1	60	5	0.48	5	0.22	150	150
STPS5L60SFY	PSMC-3L-EP	1	60	5	0.51	5	0.47	220	150
STPS10H60SFY	PSMC-3L-EP	1	60	10	0.79	10	0.02	210	175
STPS10M60SFY	PSMC-3L-EP	1	60	10	0.6	10	0.05	230	175
STPS20L60C-Y	D2PAK	2	60	2 x 10	0.7	20	0.35	220	150
STPS30H60-Y	D2PAK	2	60	30	0.57	15	0.06	230	175
100 V									
STPS1H100-Y	SMA,SMB	1	100	1	0.77	1	0.004	50	175
STPS2H100-Y	SMA,SMB	1	100	2	0.79	2	0.001	75	175
STPS2H100ZFY	SOD123Flat	1	100	2	0.7	2	0.5	50	175
STPS3H100-Y	SMB Flat	1	100	3	0.61	3	0.0015	79	175
STPS3H100AFY	SOD128Flat	1	100	3	0.61	3	0.0015	79	175
STPS3H100UFNY	SMB Flat	1	100	3	0.76	3	0.0015	135	175
STPS5H100-Y	DPAK	1	100	5	0.79	5	0.035	75	175
STPS5H100AFY	SOD128Flat	1	100	5	0.61	5	0.0035	130	175
STPS5H100SFY	PSMC-3L-EP	1	100	5	0.61	5	5	230	175
STPS10H100SFY	PSMC-3L-EP	1	100	10	0.69	10	0.008	230	175
STPS15H100C-Y	DPAK	2	100	2 x 7.5	0.8	7.5	0.003	75	175
STPS20H100C-Y	D2PAK	2	100	2 x 10	0.77	10	0.0045	3	175
STPS41H100C-Y	D2PAK,TO-220AB	2	100	2 x 20	0.8	20	0.01	220	175
STPS61H100-Y	TO-247	2	100	60	0.81	30	0.16	450	175
STPS240H100TV1Y	ISOTOP	2	100	2 x 60	0.825	120	0.09	1150	175

AUTOMOTIVE-GRADE SCHOTTKY DIODES

Part number	Package	Number of Diodes	Repetitive Peak Reverse Voltage (V_{RRM})	Average Rectified Current (I_D)	Forward Voltage V_f	V_f measure condition (@ I_f)	Reverse Current (I_R)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T _j)
			max (V)	max (A)	max (V)	(A)	max (mA)	max (A)	max (°C)
150 V									
STPS1150-Y	SMA	1	150	1	0.67	1	0.001	50	175
STPS3150-Y	SMB	1	150	3	0.67	3	0.002	100	175
170 V									
STPS40170C-Y	D ² PAK	2	170	2 x 20	0.92	20	0.03	250	175
STPS61170C-Y	TO-247 long leads	2	170	2 x 30	0.84	30	0.06	500	175
STPS80170C-Y	TO-247 long leads	2	170	2 x 40	0.74	40	0.08	500	175
STPS200170TV1Y	ISOTOP	2	170	2 x 100	0.85	100	0.2	700	150

AUTOMOTIVE-GRADE SILICON CARBIDE DIODES

Part number	Package	Number of Diodes	Repetitive Peak Reverse Voltage (V_{RRM})	Average Rectified Current (I_A)	Forward Voltage V_F	V_F measure condition (@ I_F)	Reverse Current (I_R)	Total capacitive charge (Qc)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T _j)
			max (V)	max (A)	max (V)	(A)	max (mA)	(nC)	max (A)	max (°C)
650 V second generation silicon-carbide diodes										
STPSC2H065-Y	DPAK	1	650	2	1.55	2	0.02	28.5	20	175
STPSC6C065-Y	TO-220AC	1	650	6	1.75	6	0.06	15.2	49	175
STPSC6H065BY-TR	DPAK	1	650	6	1.65	8	0.06	18	60	175
STPSC8065-Y	TO-220AC	1	650	8	1.45	8	0.105	28	46	175
STPSC8H065-Y	D ² PAK HV, DPAK	1	650	8	1.65	8	0.08	23.5	75	175
STPSC10065-Y	D ² PAK, TO-220AC	1	650	10	1.45	10	0.13	34	48	175
STPSC10C065-Y	I ² PAK	1	650	10	1.75	10	0.1	26.4	85	175
STPSC10H065-Y	D ² PAK, TO-220AC	1	650	10	1.75	10	0.1	28.5	90	175
STPSC10H065BY-TR	DPAK	1	650	10	1.65	10	0.1	28.5	90	175
STPSC12065-Y	D ² PAK, D ² PAK HV, TO-220AC	1	650	12	1.45	12	0.15	36	50	175
STPSC12C065-Y	TO-220AC	1	650	12	1.75	12	0.12	29.3	92	175
STPSC12H065-Y	TO-220AC	1	650	12	1.75	12	0.12	36	100	175
STPSC20065-Y	D ² PAK, DO-247, TO-220AC	1	650	20	1.45	20	0.3	62	90	175
STPSC20H065C-Y	TO-220AB, TO-247	2	650	2 x 10	1.75	10	0.1	28.5	90	175
STPSC40065C-Y	TO-247	2	650	2 x 20	1.45	20	0.3	62	90	175
1200 V second generation silicon-carbide diodes										
STPSC2H12-Y	DPAK HV 2L	1	1200	2	1.5	2	0.012	15.6	15	175
STPSC10H12-Y	D ² PAK, TO-220AC	1	1200	10	1.5	10	0.06	57	71	175
STPSC15H12-Y	TO-220AC	1	1200	15	1.5	15	0.09	94	105	175
STPSC20H12-Y	D ² PAK, D ² PAK HV, TO-220AC	1	1200	20	1.5	20	0.12	129	140	175
STPSC31H12C-Y	TO-247	2	1200	2 x 15	1.5	15	0.09	94	105	175

AUTOMOTIVE-GRADE ULTRAFAST DIODES

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average Rectified Current	V_F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
200 V and 300 V									
STTH1R02-Y	SOD123Flat	1	200	1	0.85	0.005	32	25	175
STTH102-Y	SMA	1	200	1	0.97	0.001	20	40	175
STTH2R02-Y	SMB	1	200	2	1	0.003	20	75	175
STTH2R02AF-Y	SOD128Flat	1	200	2	0.83	0.008	20	50	175
STTH3R02-Y	SOD128Flat	1	200	3	0.83	0.0016	21	80	175
STTH4R02-Y	DPAK, SMB, SMC C2	1	200	4	0.83,1.05	0.003	20,30	70	175
STTH602C-Y	DPAK	2	200	2 x 3	0.95	0.003	20	60	175
STTH802-Y	DPAK	1	200	8	1.05	0.006	30	100	175
STTH802SFY	PSMC-3L-EP	1	200	8	1.08	0.006	22	150	175
STTH1002C-Y	D ² PAK, DPAK	2	200	2 x 5	1.1	0.005	25	50	175
STTH1602C-Y	D ² PAK	2	200	2 x 8	1.25	0.006	26	100	175
STTH1003S-Y	DPAK	1	300	10	1.3	0.01	35	100	175
STTH2003C-Y	D ² PAK	2	300	2 x 10	1	0.02	40	110	175
400 V									
STTH1R04-Y	SMA, SMB	1	400	1	0.9	0.05	20	30	175
STTH3R04-Y	TO-220AC	1	400	30	1	0.03	45	280	175
600 V									
STTH1L06-Y	SMB Flat	1	600	1	1.4	0.001	60	20	175
STTH1R06-Y	SMB Flat	1	600	1	1.9	0.001	45	17	175
STTH1R06AFY	SOD128Flat	1	600	1	1.4	0.001	45	20	175
STTH2L06-Y	SMB Flat	1	600	2	1.4	0.002	70	30	175
STTH2R06-Y	SMB Flat	1	600	2	1.9	0.002	50	28	175
STTH3L06-Y	SMB Flat	1	600	3	1.4	0.003	70	30	175

AUTOMOTIVE-GRADE ULTRAFAST DIODES

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average Rectified Current	V_F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
STTH3R06-Y	SMB Flat	1	600	3	1.9	0.003	50	30	175
STTH5R06-Y	D ² PAK, DPAK	1	600	5	1.8	0.02	25	50	175
STTH8R06-Y	D ² PAK	1	600	8	3.2	0.05	40	80	175
STTH15RQ06-Y	D ² PAK, D ² PAK HV, DO-247, TO-220AC	1	600	15	1.85	0.02	25	120	175
STTH16L06C-Y	D ² PAK, TO-220AB	2	600	2 x 8	1.35	0.008	35	120	175
STTH30L06-Y	D ² PAK, DO-247	1	600	30	1.25	0.025	65	160	175
STTH30RQ06-Y	D ² PAK, D ² PAK HV, DO-247, TO-220AC	1	600	30	1.85	0.04	50	180	175
STTH30ST06-Y	DO-247	1	600	30	2.2	0.05	30	180	175
STTH60RQ06-Y	DO-247	1	600	60	2.95	0.08	35	425	175
800 V									
STTH208-Y	SMB Flat	1	800	2	1.55	0.005	75	30	175
1000 V									
STTH110-Y	SMB Flat	1	1000	1	1.7	0.005	75	20	175
STTH310-Y	SMB Flat	1	1000	3	1.7	0.01	75	30	175
STTH810-Y	D2PAK	1	1000	8	1.7	0.005	65	60	175
STTH1210-Y	TO-220AC	1	1000	12	1.7	0.01	65	80	175
STTH3010-Y	D ² PAK, DO-247	1	1000	30	1.8	0.015	55	50	175
STTH6010-Y	DO-247	1	1000	60	1.7	0.02	65	400	175
1200 V									
STTH112-Y	SMB Flat	1	1200	1	1.9	0.005	75	18	175
STTH1512-Y	D ² PAK	1	1200	15	2.1	0.015	75	200	175

Bridge Rectifier Diodes

BRIDGE RECTIFIER DIODES

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average Rectified Current	V_F	Reverse Current	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (A)	max (°C)
1200 V								
STBR3012	D ² PAK HV, DO-247	1	1200	30	1.3	0.002	300	175
STBR6012	DO-247	1	1200	60	1.3	0.005	500	175

Field Effect Rectifiers

FIELD EFFECT RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage (V_{RRM})	Average Rectified Current (I_A)	Forward Voltage V_F	V_F measure condition (@ I_F)	Reverse Current (I_R)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T)
			max (V)	max (A)	max (V)	spec (A)	max (mA)	max (A)	max (°C)
45 V									
FERD2045S	DKPAK	1	45	20	0.55	20	0.6	180	150
FERD30M45C	D ² PAK, I ² PAK, TO-220AB	2	45	2 x 15	0.47	15	0.6	250	175
FERD40M45C	D ² PAK, TO-220AB	2	45	2 x 20	0.5	20	0.65	275	175
FERD40U45C	D ² PAK, TO-220AB	2	45	2 x 20	0.385	20	1.8	275	175
FERD60M45C	TO-220AB	2	45	2 x 30	0.55	30	0.55	275	175
FERD60U45C	TO-220AB	2	45	2 x 30	0.5	30	1.5	300	175
50 V									
FERD15S50	PowerFLAT TM	1	50	15	0.48	10	0.65	80	150
FERD15S50SB	DKPAK	1	50	15	0.48	10	0.65	100	150
FERD20U50	PowerFLAT TM	1	50	20	0.51	20	0.8	180	150
FERD40U50C	TO-220FPAB	2	50	2 x 20	0.49	20	0.8	250	150
60 V									
FERD20H60C	D ² PAK, TO-220AB	2	60	2 x 10	0.435	5	0.2	130	175
FERD20L60C	D ² PAK, TO-220AB	2	60	2 x 10	0.415	5	0.97	140	150
FERD20M60	I ² PAK, TO-220AB	1	60	20	0.56	20	0.23	275	175
FERD20U60DJFD	PowerFLAT TM	1	60	20	0.51	20	0.8	180	150
FERD30H60C	D ² PAK, TO-220AB	2	60	2 x 15	0.46	7.5	0.17	250	175
FERD30L60C	D ² PAK, TO-220AB	2	60	2 x 15	0.42	7.5	0.82	250	150
FERD40L60C	D ² PAK, TO-220AB	2	60	2 x 20	0.425	10	1.1	250	150

FIELD EFFECT RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage (V_{RRM})	Average Rectified Current (I_A)	Forward Voltage V_F	V_F measure condition (@ I_F)	Reverse Current (I_R)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T)
			max (V)	max (A)	max (V)	spec (A)	max (mA)	max (A)	max (°C)
100 V									
FERD20H100S	DPAK, TO-220AB, TO-220FPAB	1	100	20	0.51	5	0.14	150	175
FERD20S100S	DPAK, TO-220AB	1	100	20	0.585	5	0.11	150	175
FERD30H100S	DPAK, TO 252 DPAK, TO-220AB	1	100	30	0.745	30	0.13	150	175
FERD30SM100DJF	PowerFLAT TM	1	100	30	0.595	10	0.15	180	175
FERD30SM100S	TO-220AB	1	100	30	0.585	10	0.15	250	175
FERD40H100S	D ² PAK, TO-220AB, TO-220FPAB	1	100	40	0.6	20	0.19	440	175

Schottky barrier diodes

POWER SCHOTTKY HIGH TEMPERATURE

Part number	Package	Number of Diodes	Repetitive Peak Reverse Voltage (V_{RRM})	Average forward current (I_F)	Forward Voltage V_F	V_F measure condition (@ I_F)	Reverse Current (I_R)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T)
			max (V)	(A)	max (V)	(A)	max (mA)	max (A)	max (°C)
30 , 45 and 60 V									
STPS8L30DEE	PowerFLAT™	1	30	8	0.39	8	0.2	100	150
STPS1045DEE	PowerFLAT™	1	45	10	0.53	10	0.2	100	175
STPS10H60SF	PSMC-3L	1	60	10	0.845	10	0.02	210	175
80 V									
STPS15LCD80C	TO-220FPAB	2	80	2 x 5	0.855	7.5	0.01	120	175
STPS20LCD80C	D ² PAK, I ² PAK, TO-220AB	2	80	2 x 10	0.88	10	0.015	150	175
100 V									
STPS1H100	SMA, SMA Flat, SMB	1	100	1	0.77	1	0.004	50	175
STPS1H100MF	STmiteFLAT	1	100	1	0.77	1	0.004	50	175
STPS2H100	SMA, SMA Flat, SMB, SMB Flat	1	100	2	0.79	2	0.001	75	175
STPS2H100RL	DO 41 PLASTIC	1	100	2	0.86	2	0.001	50	175
STPS2H100ZF	SOD123Flat	1	100	2	0.86	2	0.001	50	175
STPS3H100	SMB, SMB Flat	1	100	3	0.76	3	0.001	75	175
STPS3H100AF	SOD128Flat	1	100	3	0.76	3	0.0015	79	175
STPS5H100	DPAK	1	100	5	0.79	5	0.0035	75	175
STPS5H100AF	SOD128Flat	1	100	5	0.76	5	0.0035	130	175
STPS5H100SF	PSMC-3L-EP	1	100	5	0.745	5	0.008	230	175
STPS5H100UFN	SMB Flat	1	100	5	0.745	5	0.008	190	175
STPS8H100	D ² PAK, TO-220AC, TO-220FPAC	1	100	8	0.71	8	0.0045	250	175

POWER SCHOTTKY HIGH TEMPERATURE

Part number	Package	Number of Diodes	Repetitive Peak Reverse Voltage (V_{RRM})	Average forward current (I_F)	Forward Voltage V_F	V_F measure condition (@ I_F)	Reverse Current (I_R)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T)
			max (V)	(A)	max (V)	(A)	max (mA)	max (A)	max (°C)
STPS10H100C	D ² PAK, TO-220AB, TO-220FPAB	2	100	2 x 5	0.73	5	0.0035	180	175
STPS15H100C	DKPAK	2	100	2 x 7.5	0.67	10	0.003	75	175
STPS16H100C	D ² PAK	2	100	2 x 8	0.77	8	0.0036	200	175
STPS20H100C	D ² PAK, I ² PAK, TO-220AB, TO-220FPAB	2	100	2 x 10	0.77	10	0.0045	250	175
STPS20S100C	TO-220AB, TO-220FPAB	2	100	2 x 10	0.85	10	0.0035	180	175
STPS30H100C	TO-220AB, TO-247	2	100	2 x 15	0.8	15	0.005	250	175
STPS30H100DJF	PowerFLAT™	1	100	30	0.76	15	0.006	250	150
STPS40H100CW	TO-247	2	100	40	0.73	20	0.01	300	175
STPS41H100C	D ² PAK, I ² PAK, TO-220AB	2	100	2 x 20	0.8	20	0.01	220	175
STPS60H100C	TO-220AB	2	100	2 x 30	0.84	30	0.01	300	175
STPS61H100C	TO-247	2	100	2 x 30	0.79	30	0.016	450	175
STPS80H100	ISOTOP	2	100	80	0.78	40	0.02	700	150
120 V									
STPS10120C	TO-220AB	2	120	2 x 5	0.85	5	0.006	120	175
STPS20120C	DKPAK, I ² PAK, TO-220AB	2	120	2 x 10	0.92	10	0.01	150	175
STPS20120D	TO-220AC	1	120	20	0.93	20	0.02	200	175
STPS30120C	TO-220AB	2	120	2 x 15	0.92	15	0.015	180	175
STPS30120DJF	PowerFLAT™	1	120	30	0.92	30	0.035	200	150
STPS40120C	TO-220AB	2	120	2 x 20	0.9	20	0.025	200	175
150 V									
STPS1150	DO 41 PLASTIC, SMA, SMA Flat	1	150	1	0.82	1	0.001	50,75	175
STPS10150C	D ² PAK, TO-220AB, TO-220FPAB	2	150	2 x 5	0.92	5	0.002	120	175
STPS16150C	TO-220AB	2	150	2 x 8	0.92	8	0.003	150	175

POWER SCHOTTKY HIGH TEMPERATURE

Part number	Package	Number of Diodes	Repetitive Peak Reverse Voltage (V_{RRM})	Average forward current (I_F)	Forward Voltage V_F	V_F measure condition (@ I_F)	Reverse Current (I_R)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T)
			max (V)	(A)	max (V)	(A)	max (mA)	max (A)	max (°C)
STPS20150C	D ² PAK,I ² PAK,TO-220AB, TO-220FPAB	2	150	2 x 10	0.92	10	0.005	180	175
STPS30150C	D ² PAK,TO-220AB, TO-220FPAB,TO-247	2	150	2 x 15	0.92	15	0.0065	220	175
STPS40150C	D ² PAK,TO-220AB,TO-247	2	150	2 x 20	0.91	20	0.008	250	175
STPS60150C	TO-220AB	2	150	2 x 30	0.94	30	0.015	270	175
STPS61150C	TO-247	2	150	2 x 30	0.84	30	0.02	500	175
STPS80150C	TO-247	2	150	2 x 40	0.84	40	0.03	500	175
170 V									
STPS2170	DO-15,SMA,SMA Flat	1	170	2	0.82	2	0.015	70	-
STPS3170	DO-201AD,SMA Flat,SMB, SMB Flat	1	170	3	0.82	3	0.002	75	175
STPS10170C	D2PAK,DPAK	2	170	2 x 5	0.92	5	0.01	120	175
STPS16170C	D2PAK,DPAK	2	170	2 x 8	0.92	8	0.015	150	175
STPS20170C	D2PAK,TO-220AB,TO-220FPAB	2	170	2 x 10	0.92	10	0.015	180	175
STPS30170C	D2PAK,TO-247	2	150,170	2 x 15	0.92	15	0.02	220	175
STPS30170DJF	PowerFLAT™	1	170	30	0.95	30	0.015	200	150
STPS40170C	D2PAK,TO-220AB,TO-247	2	100,170	2 x 20	0.85,0.92	10,20	0.003	200,250	175
STPS60170C	TO-220AB	2	170	2 x 30	0.94	30	0.035	270	175
STPS61170C	TO-247	2	170	2 x 30	0.84	30	0.06	500	175
STPS80170C	TO-247	2	170	2 x 40	0.84	40	0.08	500	175
STPS200170TV1	ISOTOP	2	170	2 x 100	0.85	100	0.2	700	150

POWER SCHOTTKY LOW VF

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	V _F measure condition (@ I _F)	Reverse Current	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	spec (A)	max (mA)	max (A)	max (°C)
15 V									
STPS20L15	D ² PAK, TO-220AC	1	15	20	0.41	19	6	310	125
STPS40L15C	TO-220AB, TO-247	2	15	2 x 20	0.41	19	6	310	125
STPS120L15	ISOTOP	2	15	2 x 60	0.43	60	22	1200	125
20 V									
STPS0520Z	SOD-123	1	20	0.5	0.385	0.5	0.15	5.5	125
STPS120M	STmite	1	20	1	0.49	1	0.0039	50	150
STPS120MF	STmiteFLAT	1	20	1	0.49	1	0.0039	50	150
STPS1L20M	STmite	1	20	1	0.43	1	0.075	50	150
STPS1L20MF	STmiteFLAT	1	20	1	0.43	1	0.075	50	150
25 V									
STPS2L25	SMA Flat, SMB	1	25	2	0.45	2	0.09	75	150
STPS5L25	DPAK	1	25	5	0.47	5	0.35	75	150
STPS10L25	D ² PAK, TO-220AC	1	25	10	0.46	10	0.8	200	150
STPS15L25	TO-220AC	1	25	15	0.46	15	1.3	250	150
STPS20L25C	D ² PAK, TO-220AB	2	25	2 x 10	0.46	10	0.8	220	150
30 V									
STPS1L30	SMA, SMA Flat, SMB	1	30	1	0.95	1	0.2	75	150
STPS1L30M	STmite	1	30	1	0.395	1	0.2	50	150
STPS1L30MF	STmiteFLAT	1	30	1	0.395	1	0.2	50	150
STPS2L30	SMA, SMA Flat	1	30	2	0.45	2	0.2	75	150
STPS8L30	DPAK	1	30	8	0.49	8	1	75	150
STPS15L30C	DPAK	2	30	2 x 7.5	0.48	7.5	1	75	150
STPS15L30CDJF	PowerFLAT™	2	30	2 x 7.5	0.39	7.5	1	75	150

POWER SCHOTTKY LOW VF

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V_f	V_f measure condition (@ I_f)	Reverse Current	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	spec (A)	max (mA)	max (A)	max (°C)
STPS30L30C	D ² PAK,I2PAK,TO-220AB	2	30	2 x 15	0.46	15	1.5	220	150
STPS30L30DJF	PowerFLAT™	1	30	30	0.51	30	0.75	250	150
STPS41L30C	D2PAK	2	30	2 x 20	0.48	20	1.5	220	150
STPS60L30C	TO-247	2	30	2 x 30	0.46	30	4	600	150
40 V									
STPS1L40	SMA,S MA Flat, SMB, SOD123Flat	1	40	1	0.5	1	0.035	50	175
STPS1L40M	STmite	1	40	1	0.46	1	0.035	50	150
STPS2L40	SMA Flat, SMB, SMB Flat	1	40	2	0.43	2	0.22	75	150
STPS340	DPAK, SMA Flat, SMB, SMB Flat, SMC	1	40	3	0.63	3	0.02	75	150
STPS5L40	DO-201AD	1	40	5	0.5	5	0.2	150	150
STPS10L40C	D ² PAK, TO-220AB	2	40	2 x 5	0.53	5	0.2	150	150
45 V									
STPS3L45AF	SMA Flat	1	45	3	0.57	3	0.3	75	150
STPS15L45C	DPAK	2	45	2 x 7.5	0.52	7.5	0.5	75	150
STPS20L45C	D ² PAK, TO-220AB, TO-220FPAB	2	45	2 x 10	0.55	10	0.2	180	150
STPS30L45C	D ² PAK, TO-220AB, TO-220FPAB, TO-247	2	45	2 x 15	0.55	15	0.4	220	150
STPS40L45C	D ² PAK, TO-220AB, TO-247	2	45	2 x 20	0.53	20	0.6	230	150
STPS41L45C	D ² PAK	2	45	2 x 20	0.53	20	1.2	220	150
STPS60L45C	TO-247	2	45	2 x 30	0.55	30	1.5	600	150
STPS61L45C	TO-220AB, TO-247	2	45	2 x 30	0.56	30	1.5	400	150
60 V									
STPS1L60	DO 41 PLASTIC, SMA, SMA Flat, SOD123Flat, STmiteFLAT	1	60	1	0.57	1	0.05	40,50	150

POWER SCHOTTKY LOW VF

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	V _F measure condition (@ I _F)	Reverse Current	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	spec (A)	max (mA)	max (A)	max (°C)
STPS2L60	DO 41 PLASTIC, SMA, SMA Flat, SMB Flat	1	60	2	0.6	2	0.1	75	150
STPS2L60	DO 41 PLASTIC, SMA, SMA Flat, SMB Flat	1	60	2	0.6	2	0.1	75	150
STPS3L60	DO-15, SMB, SMB Flat	1	60	3	0.62	3	0.15	100	150
STPS3L60S	SMC	1	60	3	0.65	3	0.15	75	150
STPS5L60	DO-201AD, SMB, SMB Flat, SMC	1	60	5	0.52	5	0.22	100	150
STPS5L60SF	PSMC-3L-EP	1	60	5	0.51	5	0.47	220	150
STPS10L60	TO-220AC	1	60	10	0.6	10	0.35	220	150
STPS10L60C	TO-220FPAB	2	60	2 x 5	0.55	5	0.22	180	150
STPS20L60C	D ² PAK, TO-220AB	2	60	2 x 10	0.6	10	0.35	220	150
STPS15L60C	DPAK	2	60	2 x 7.5	0.62	7.5	0.2	75	150
STPS30L60C	D ² PAK, TO-220AB, TO-247	2	60	2 x 15	0.6	15	0.48	230	150
STPS41L60C	D ² PAK, TO-220AB	2	60	2 x 20	0.6	20	0.6	22	150
STPS61L60C	TO-220AB, TO-247	2	60	2 x 30	0.66	30	0.8	400	150
120 V									
STPS30L120C	I ² PAK, TO-220AB, TO-220FPAB	2	120	2 x 15	0.57,0.88	15	0.2	220	125,150

POWER SCHOTTKY MEDIUM VF AND IR

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	V _F measure condition (@ I _r)	Reverse Current	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	spec (A)	max (mA)	max (A)	max (°C)
20 V									
1N5817	DO 41 PLASTIC	1	20	1	0.45	1	0.5	25	150
30 V									
1N5818	DO 41 PLASTIC	1	30	1	0.5	1	0.5	25	150
STPS130	SMA, SMA Flat, SMB	1	30	1	0.55	1	0.01	45,60	150
STPS2030C	TO-220AB	2	30	2 x 10	0.5	10	1	180	150
STPS3030C	D ² PAK, I ² PAK	2	30	2 x 15	0.49	15	1	250	150
40 V									
STPS0540Z	SOD-123	1	40	0.5	0.53	0.5	0.04	5.5	150
1N5819	DO 41 PLASTIC	1	40	1	0.5,0.55	1	0.5	25	150
STPS140	SMA, SMA Flat, SMB	1	40	1	0.55	1	0.012	60	150
STPS140Z	SOD-123	1	40	1	0.55	1	0.01	5.5	150
1N5822	DO-201AD	1	40	3	0.525	3	2	80	150
STPS640C	DPAK	2	40	2 x 3	0.63	3	0.1	75	150
45 V									
STPS745	D ² PAK, TO-220AC, TO-220FPAC	1	45	7	0.57	7.5	0.1	150	175
STPS1045B	DPAK	1	45	10	0.63	10	0.1	75	175
STPS1045FD	TO-220AC	1	45	10	0.84	20	0.1	180	175
STPS1545	D ² PAK, TO-220AC, TO-220FPAC	1	45	15	0.84	15	0.2	220	175
STPS1545C	D ² PAK, I ² PAK, TO-220AB	2	45	2 x 7.5	0.84	15	0.1	150	175
STPS2045C	D ² PAK, TO-220AB, TO-220FPAB	2	45	2 x 10	0.84	20	0.1	180	175
STPS2545C	D ² PAK, TO-220AB	2	45	2 x 12.5	0.84	25	0.125	200	175
STPS3045C	D ² PAK, TO-220AB, TO-247	2	45	2 x 15	0.84	30	0.2	220	175
STPS3045DJF	PowerFLAT™	1	45	30	0.64	30	0.3	200	175

POWER SCHOTTKY MEDIUM VF AND IR

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V_F	V_F measure condition (@ I_r)	Reverse Current	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	spec (A)	max (mA)	max (A)	max (°C)
STPS4045C	TO-247	2	45	2 x 20	0.76	20	0.2	220	175
STPS6045C	TO-247	2	45	2 x 30	0.84	60	0.5	400	175
STPS12045	ISOTOP	2	45	120	0.91	120	1	900	150
STPS16045	ISOTOP	2	45	160	0.95	160	1	900	150
STPS24045	ISOTOP	2	45	240	0.91	240	2	1500	150
60 V									
STPS0560Z	SOD-123	1	60	0.5	0.53	0.5	0.05	5.5	150
STPS160	SMA, SMA Flat, SMB	1	60	1	0.67	1	0.004	75	150
STPS360	SOD128Flat	1	60	3	0.61	3	0.15	65	175
STPS10M60SF	PSMC-3L-EP	1	60	10	0.65	10	0.05	230	175
STPS20M60	TO-220AC	1	60	20	0.58	20	0.13	380	150
STPS20M60S	D2PAK	1	60	20	0.57	20	0.13	600	150
STPS20SM60	TO-220AC	1	60	20	0.6	20	0.085	400	150
STPS3060C	TO-247	2	60	2 x 15	0.85	15	0.15	200	150
STPS30H60C	D ² PAK, TO-220AB, TO-220FPAB	2	60	2 x 15	0.66	15	0.06	230	150
STPS30M60C	TO-220AB	2	60	2 x 15	0.59	15	0.08	400	150
STPS30M60DJF	PowerFLAT™	1	60	30	0.72	30	0.165	250	150
STPS30M60S	D ² PAK, TO-220AB	1	60	30	0.59	30	0.165	600	150
STPS30SM60S	D ² PAK	1	60	30	0.615	30	0.135	600	150
STPS40M60C	TO-220AB	2	60	2 x 20	0.595	20	0.11	220	150
STPS40SM60C	TO-220AB	2	60	2 x 20	0.63	20	0.09	400	150
80 V									
STPS20SM80C	TO-220AB	2	80	2 x 10	0.78	10	0.025	220	175
STPS30M80C	TO-220AB	2	80	2 x 15	0.745	15	0.04	220	175

POWER SCHOTTKY MEDIUM VF AND IR

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	V _F measure condition (@ I _F)	Reverse Current	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	spec (A)	max (mA)	max (A)	max (°C)
STPS30SM80C	TO-220FPAB	2	80	2 x 15	0.79	15	0.04	220	175
STPS40M80C	D ² PAK, TO-220AB	2	80	2 x 20	0.735	20	0.065	150	175
100 V									
STPS6M100SF	PSMC-3L-EP	1	100	6	0.8	6	0.035	200	175
STPS20M100S	D ² PAK, TO-220AB	1	100	20	0.85	20	0.04	350	150
STPS20SM100S	TO-220AB	1	100	20	0.9	20	0.03	350	150
STPS30M100DJF	PowerFLAT™	1	100	30	0.96	30	0.1	200	150
STPS30M100S	TO-220AB, TO-220FPAB	1	100	30	0.8	30	0.175	300	150
STPS30SM100S	D ² PAK, TO-220AB	1	100	30	0.87	30	45	530	150
STPS40M100C	I ² PAK, TO-220AB	2	100	2 x 20	0.64,0.78	20	0.07	230,530	150
STPS40SM100C	TO-220AB	2	100	2 x 20	0.81	20	0.045	230	150
120 V									
STPS10M120SF	PSMC-3L-EP	1	120	10	0.82	10	0.025	340	175
STPS20SM120S	TO-220AB	1	120	20	0.89	20	0.21	220	150
STPS30SM120S	TO-220AB, TO-220FPAB	1	120	30	0.95	30	0.275	240	150
STPS40M120C	TO-220AB	2	120	2 x 20	0.79	20	0.37	220	150
STPS40SM120C	I ² PAK	2	120	2 x 20	0.83	20	0.275	210	150
170 V									
STPS1170	SMA Flat	1	170	1	0.82	1	0.0015	45	175
STPS2170	SMA Flat	1	170	2	0.82	2	0.0028	70	175
STPS3170	SMA Flat, SMB Flat	1	170	3	0.82	3	0.004	75	175
200 V									
STPS4S200	DPAK, SMB Flat, SMC	1	200	4	0.71	4	0.005	130	175
STPS60SM200C	TO-247	2	200	2 x 15	0.83	30	0.05	500	175

SIGNAL SCHOTTKY DIODES

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	Reverse Current	Junction Capacitance	Reverse recovery time
			max (V)	max (A)	max (V)	max (mA)	max (pF)	max (ns)
10 V and 20 V								
BAT60	SOD-323	1	10	3	0.4	0.006	60	0
BAT20J	SOD-323	1	23	1	0.62	0.012	30	0
30 V								
BAR42	SOT23	1	30	0.1	1	0.5	10	5
BAR43	SOT23	1,2	30	0.1	1	0.5	10	5
BAT30	SOD-523, SOT-323	1,2	30	0.3	0.58	0.005	35	0
BAT30F4	ST0201	1	30	0.3	0.205	0.05	-	-
BAT42	DO-35	1	30	0.2	0.65	0.05	15	5
BAT43	DO-35	1	30	0.2	0.45	0.05	15	5
TMMBAT42	MiniMELF	1	30	0.2	1	0.05	15	5
TMMBAT43	MiniMELF	1	30	0.2	0.45	0.05	15	5
40 V								
BAT48	DO-35, SOD-123, SOD-323	1	40	0.35	0.9	0.05	40	10
BAT54	SOD-323, SOD-523, SOT-323, SOT23	1,2	40	0.3	0.9	0.001	10	5
TMBYV10-40	MELF	1	40	1	0.55	0.5	400	0
TMMBAT48	MiniMELF	1	40	0.35	0.9	0.05	40	10
60 V, 70 V and 80 V								
1N6263	DO-35	1	60	0.015	1	0.2	2.2	0.1
TMBYV10-60	MELF	1	60	1	0.7	0.5	300	0
1N5711	DO-35	1	70	0.015	1	0.02	2	0.1
BAR18	SOT23	1	70	0.07	0.41	0.2	2	0.1
BAS70	SOD-323, SOD-523, SOT-323, SOT23	1,2	70	0.07	1	0.01	2	0
TMBAT49	MELF	1	80	0.5	1	0.2	200	0

SIGNAL SCHOTTKY DIODES

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V_F	Reverse Current	Junction Capacitance	Reverse recovery time
			max (V)	max (A)	max (V)	max (mA)	max (pF)	max (ns)
100 V								
BAR46	SOT23	1,2	100	0.15	0.45	0.005	20	0
BAT41	SOD-123, SOD-523	1	100	0.2	1	0.1	10	0
BAT41RL	DO-35	1	100	0.2	1	0.1	10	0
BAT46	SOD-123, SOD-323, SOT-323	1,2	100	0.15	1	20	20	0
BAT46RL	DO-35	1	100	0.15	1	20	20	0
TMMBAT41	MiniMELF	1	100	0.2	1	0.1	10	0
TMMBAT46	MiniMELF	1	100	0.15	1	20	20	0

Silicon-carbide diodes

SILICON-CARBIDE DIODES

Part number	Package	Number of Diodes	Repetitive Peak Reverse Voltage (V_{RRM})	Average rectified current (I_A)	Forward Voltage V_f	V_f measure condition (@ I_f)	Reverse Current (I_R)	Total capacitive charge (Q_C)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T)
			max (V)	max (A)	max (V)	(A)	max (mA)	(nC)	max (A)	max (°C)
650 V										
STPSC2H065	DPAK	1	650	2	1.55	2	0.02	7.9	20	175
STPSC4H065	DPAK,TO-220AC,TO-220AC Ins	1	650	4	1.75	4	0.04	12.5	38	175
STPSC4H065DLF	PowerFLAT 8x8 HV	1	650	4	1.55	4	0.04	14.3	38	175
STPSC6H065	D ² PAK,DPAK,TO-220AC, TO-220AC Ins	1	650	6	1.75	6	0.06	18	60	175
STPSC6H065DLF	PowerFLAT 8x8 HV	1	650	6	1.55	6	0.06	19.9	58	175
STPSC6TH13TI	TO-220AB Ins	2	650	6	1.75	6	0.06	18	60	175
STPSC8065	TO-220AC	1	650	8	1.45	8	0.105	28	46	175
STPSC8H065	D ² PAK,DPAK,TO-220AC, TO-220AC Ins	1	650	8	1.75	8	0.08	23.5	75	175
STPSC8H065C	TO-220AB	2	650	2 x 4	1.75	4	0.04	12.5	38	175
STPSC8H065DLF	PowerFLAT 8x8 HV	1	650	8	1.55	8	0.08	26	75	175
STPSC8TH13TI	TO-220AB Ins	2	650	8	1.75	8	0.08	23.5	75	175
STPSC10065	TO-220AC	1	650	10	1.45	10	0.13	34	48	175
STPSC10065DLF	PowerFLAT 8x8 HV	1	650	10	1.45	10	0.13	-	48	175
STPSC10H065	D ² PAK,DPAK,TO-220AC, TO-220AC Ins	1	650	10	1.75	10	0.1	28.5	90	175
STPSC10H065DLF	PowerFLAT 8x8 HV	1	650	10	1.75	10	0.1	28.5	90	175
STPSC10TH13TI	TO-220AB Ins	2	650	10	1.75	10	0.1	28.5	90	175

SILICON-CARBIDE DIODES

Part number	Package	Number of Diodes	Repetitive Peak Reverse Voltage (V_{RRM})	Average rectified current (I_o)	Forward Voltage V_f	V_f measure condition (@ I_f)	Reverse Current (I_R)	Total capacitive charge (Q_p)	Non-Repet Peak Forward Surge Current (I_{FSM})	Junction Temperature (T_j)
			max (V)	max (A)	max (V)	(A)	max (mA)	(nC)	max (A)	max (°C)
STPSC12065	D ² PAK,TO-220AC	1	650	12	1.45	12	0.15	36	50	175
STPSC12H065	TO-220AC	1	650	12	1.75	12	0.12	36	100	175
STPSC12H065C	TO-220AB	2	650	2 x 6	1.75	6	0.06	18	60	175
STPSC16H065A	TO-247	1	650	16	-	16	0.14	41	120	175
STPSC16H065C	TO-220AB	2	650	2 x 8	1.75	8	0.08	23.5	75	175
STPSC20065	DO-247,TO-220AC, TO-220AC Ins	1	650	20	1.45	20	0.3	62	90	175
STPSC20H065C	TO-220AB,TO-247	2	650	2 x 10	1.75	10	0.1	28.5	90	175
STPSC20065C	TO-247 long leads	2	650	2 x 10	1.45	10	0.13	34	48	175
STPSC40065C	TO-247	2	650	2 x 20	1.45	20	0.3	62	90	175
1200 V										
STPSC2H12	DPAK HV 2L,TO-220AC	1	1200	2	1.5	2	0.012	15.6	15	175
STPSC5H12	DPAK HV 2L,TO-220AC	1	1200	5	1.5	5	0.03	36	35	175
STPSC6H12	DPAK HV 2L	1	1200	6	1.9	6	0.4	29	36	175
STPSC10H12	D ² PAK,DO247 LONG LEADS, DPAK HV 2L,TO-220AC	1	1200	10	1.5	10	0.06	57	71	175
STPSC10H12C	TO-247 long leads	2	1200	2 x 5	1.5	5	0.03	57	210	175
STPSC15H12	DO247 LONG LEADS,TO-220AC	1	1200	15	1.5	15	0.09	94	105	175
STPSC20H12	D ² PAK,DO247 LONG LEADS, TO-220AC	1	1200	20	1.5	20	0.12	129	140	175
STPSC20H12C	TO-247 long leads	2	1200	2 x 10	1.5	10	0.06	57	420	175
STPSC30H12C	TO-247 long leads	2	1200	2 x 15	1.5	15	0.09	94	630	175
STPSC40H12C	TO-247 long leads	2	1200	2 x 20	1.5	20	0.12	129	140	175

Ultrafast Rectifiers

200 V TO 400 V ULTRAFAST RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
200 V									
STTH1R02	DO 41 PLASTIC, DO-15,SMA,SMB	1	200	1.5	1	0.003	20	60	175
STTH2R02	SMA,SMB	1	200	2	1	0.003	20	75	175
STTH302	DO-201AD	1	200	3	0.95	0.003	35	130	175
STTH302S	SMC	1	200	3	0.95	0.003	35	100	175
STTH3R02	DO-15,DO-201AD,SMC	1	200	3	1	0.003	20	75	175
STTH4R02	DPAK,SMB,SMC	1	200	4	1.05	0.003	20	70	175
STTH602C	TO-220AB	2	200	2 x 3	1.1	0.003	20	60	175
STTH802	D ² PAK,DPAK,TO-220AC, TO-220FPAC	1	200	8	1.05	0.006	22	100	175
STTH802SF	PSMC-3L-EP	1	200	8	1.08	0.006	22	150	175
STTH802C	DPAK	2	200	2 x 4	1.1	0.004	20	50	175
STTH1002C	D ² PAK,DPAK,I ² PAK, TO-220AB,TO-220FPAB	2	200	2 x 5	1.1	0.005	20	50	175
STTH1202	TO-220AC	1	200	12	1.1	0.01	24	100	175
STTH1502	TO-220AC,TO-220AC Ins, TO-220FPAC	1	200	15	1.1	0.001	25	150	175
STTH1602C	D ² PAK,TO-220AB,TO-220FPAB	2	200	2 x 8	1.1	0.006	26	80	175
STTH2002	D ² PAK,TO-220AC, TO-220AC Ins	1	200	20	1.1	0.01	20	175	175
STTH2002C	D ² PAK,I ² PAK,TO-220AB, TO-220FPAB	2	200	2 x 10	1.1	0.01	27	90	175

200 V TO 400 V ULTRAFAST RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
STTH30R02DJF	PowerFLAT™	1	200	30	0.95	0.01	35	300	175
STTH3002	D ² PAK,DOP3 Ins	1	200	30	1.05	0.02	27	300	175
STTH3002C	D ² PAK,TO-220AB,TO-247	2	200	2 x 15	1.05	0.02	22	180	175
STTH30W02C	TO-247	2	200	2 x 15	1.4	0.06	25	140	175
STTH6002C	TO-247,TOP3 Ins	2	200	2 x 30	1.05	0.03	27	330	175
STTH10002	ISOTOP	2	200	2 x 50	1	0.05	30	750	150
STTH20002TV	ISOTOP	2	200	2 x 100	1.2	0.1	50	1000	150
300 V									
STTH803	D ² PAK,TO-220AC	1	300	8	1	0.02	25	100	175
STTH8R03	TO-220AC	1	300	8	1.3	0.01	30	80	175
STTH8R03DJF	PowerFLAT™	1	300	8	1	0.04	35	280	175
STTH1003S	DPAK	1	300	10	1.1	0.01	13	100	175
STTH2003C	D ² PAK,I ² PAK,TO-220AB,TO-220FPAB	2	300	2 x 10	1	0.02	25	110	175
STTH20L03C	TO-220AB	2	300	2 x 10	0.95	0.01	35	150	175
STTH3003	TO-247	2	300	2 x 15	1	0.04	30	140	175
STTH30R03	D ² PAK,TO-247	2	300	2 x 15	1.4	0.02	35	120	175
STTH60W03C	TO-247	2	300	2 x 15	1.15	0.02	35	280	175
STTH50W03C	TO-247	2	300	2 x 25	1.2	0.015	27	200	175
STTH6003	TO-247	2	300	2 x 30	1	0.06	40	300	175
STTH60P03S	TO-247	1	300	60	1.5	0.1	50	250	175
STTH12003	ISOTOP	2	300	2 x 60	1	0.12	55	600	150
STTH16003	ISOTOP	2	300	2 x 80	0.95	0.2	60	800	150
STTH20003	ISOTOP	2	300	2 x 100	0.95	0.2	90	1000	150

200 V TO 400 V ULTRAFAST RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
400 V									
STTH1R04	DO-15,SMA,SMB	1	400	1	1.5	0.005	20	30	175
STTH3R04	DO-15,DO-201AD,SMB,SMC	1	400	3	1.5	0.005	25	60	175
STTH8R04	D ² PAK,TO-220AC,TO-220AC Ins	1	400	8	1.5	0.01	35	120	175
STTH10R04	D ² PAK	1	400	10	1.7	0.001	40	100	175
STTH16R04C	D ² PAK,TO-220AB	2	400	2 x 8	1.5	0.01	35	120	175
STTH20R04	D ² PAK,TO-220AC,TO-220FPAC	1	400	20	1.7	0.02	45	150	175
STTH30R04	D ² PAK,DO-247,TO-220AC	1	400	30	1.45	0.015	50	300	175
STTH61R04TV	ISOTOP	2	400	2 x 30	1.45	0.015	35	350	150
STTH6004W	DO-247	1	400	60	1.2	0.05	50	600	175
STTH60R04	DO-247	1	400	60	1.5	0.06	45	650	175
STTH61W04S	TO-247	1	400	60	1.35	0.02	55	500	175
STTH100W04C	TO-247	2	400	2 x 50	1.2	0.025	50	350	175
STTH200F04	ISOTOP	2	400	2 x 50	1.45	0.075	80	1000	150
STTH120R04TV	ISOTOP	2	400	2 x 60	1.5	0.06	55	700	150
STTH20004TV1	ISOTOP	2	400	2 x 100	1.2	0.1	100	900	150
STTH200L04TV1	ISOTOP	2	400	2 x 100	1.2	0.1	100	900	150
STTH200R04TV	ISOTOP	2	400	2 x 100	1.35	0.08	70	1000	150
STTH240F04	ISOTOP	2	400	2 x 120	1.43	0.085	80	1000	150

600 V ULTRAFAST RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V_F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
STTH1L06	DO 41 PLASTIC,SMA,SMB	1	600	1	1.3	0.001	80	20	175
STTH1R06	DO 41 PLASTIC,SMA,SMB	1	600	1	1.7	0.001	25	20	175
STTH1R06AF	SOD128Flat	1	600	1	1.4	0.001	45	20	175
STTH2L06	DO 41 PLASTIC,SMA,SMB	1	600	2	1.3	0.002	85	35	175
STTH2R06	DO 41 PLASTIC,SMA,SMB,SMC	1	600	2	1.7	0.002	30	30	175
STTH3L06	DO-201AD,SMB,SMC	1	600	3	1.3	0.003	85	60	175
STTH3R06	DO-201AD,SMB,SMC	1	600	3	1.25	0.003	30	45	175
STTH4L06	DO-201AD	1	600	4	1.05	0.003	55	80	175
STTH4R06DEE	PowerFLAT 3.3x3.3	1	600	4	1.7	0.003	40	60	150
STTH506	DPAK,TO-220AC	1	600	5	1.4,1.85	0.005	30	55	175
STTH506D	TO-220AC Ins	1	600	5	3.6	0.006	25	60	150
STTH5L06	DO-201AD,DPAK,TO-220AC, TO-220FPAC	1	600	5	1.3	0.005	95	60	175
STTH5R06	DPAK,TO-220AC,TO-220FPAC	1	600	5	1.8	0.02	25	50	175
STTH5R06DJF	PowerFLAT™	1	600	5	2	0.06	40	190	175
STTH806	D ² PAK,TO-220AC,TO-220AC Ins	1	600	8	1.4	0.008	35	90	175
STTH806DTI	TO-220AC Ins	2	600	2 x 4	3.6	0.01	30	180	150
STTH806TTI	TO-220AB Ins	2	600	2 x 4	3.6	0.01	30	80	150
STTH8L06	D ² PAK,TO-220AC,TO-220FPAC	1	600	8	1.3	0.008	105	120	175
STTH8R06	D ² PAK,TO-220AC, TO-220AC Ins,TO-220FPAC	1	600	8	2.9	0.03	25	80	175
STTH8S06	DPAK,TO-220AC,TO-220FPAC	1	600	8	1.9	0.02	18	60	175
STTH8ST06	TO-220AC Ins	1	600	8	3.1	0.006	26	55	175
STTH8T06	TO-220AC Ins	1	600	8	2.95	0.01	30	80	175
STTH10LCD06	DPAK,TO-220FPAC	1	600	10	2	0.005	50	80	175

600 V ULTRAFAST RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
STTH10LCD06C	TO-220AB,TO-220FPAB	2	600	2 x 5	2	0.001	25	45	175
STTH12R06	D ² PAK,TO-220AC, TO-220AC Ins,TO-220FPAC	1	600	12	2.9	0.045	25	100	175
STTH12S06	TO-220FPAC	1	600	12	1.9	0.03	21	100	175
STTH12T06	TO-220AC Ins	1	600	12	2.95	0.02	33	90	175
STTH1506D	DOP3 Ins	1	600	15	3.6	0.02	35	130	150
STTH1506TPI	TOP3 Ins	2	600	2 x 7.5	3.6	0.02	35	130	150
STTH15AC06	TO-220FPAC	1	600	15	1.5	0.002	30	120	175
STTH15AC06C	TO-220AB,TO-220FPAB	2	600	2 x 7.5	1.8	0.001	25	80	175
STTH15L06	D ² PAK,TO-220AC,TO-220FPAC	1	600	15	1.55	0.015	55	200	175
STTH15R06	TO-220AC,TO-220FPAC	1	600	15	2.9	0.06	30	150	175
STTH15RQ06	D ² PAK,D2PAK HV,DO-247, TO-220AC	1	600	15	1.85	0.02	25	120	175
STTH16L06C	D ² PAK,TO-220AB,TO-220FPAB	2	600	2 x 8	1.64	0.008	35	120	175
STTH20LCD06C	TO-220FPAB	2	600	2 x 10	2	0.001	50	80	175
STTH25M06	DPAK,TO-220FPAC	1	600	25	3.4	0.06	35	170	175
STTH3006	DO-247,DOP3 Ins	1	600	30	1.4	0.025	50	300	175
STTH3006D	DOP3 Ins	2	600	2 x 15	3.6	0.04	45	180	150
STTH30AC06	TO-220FPAC	1	600	30	1.95	0.02	35	270	175
STTH30AC06C	TO-247 long leads,TO-3PF	2	600	2 x 15	1.95	0.01	30	140	175
STTH30R06C	TO-247	2	600	2 x 15	1.95	0.06	30	120	175
STTH30ACS06W	DO-247	1	600	30	2.4	0.005	30	190	175
STTH30L06	D ² PAK,DO-247	1	600	30	1.25	0.025	65	300	175
STTH30L06C	D ² PAK,TO-247	2	600	2 x 15	1.45	0.015	55	130	175
STTH60RQ06C	TO-247 long leads	2	600	2 x 15	2.95	0.04	30	200	175

600 V ULTRAFAST RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V_F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
STTH30R06	DO-247,DOP3 Ins	1	600	30	1.85	0.025	50	300	175
STTH30RQ06	D ² PAK,D2PAK HV, DO-247,DO247 LONG LEADS,TO-220AC	1	600	30	2.95	0.04	30	180	175
STTH31AC06S	TO-247 long leads,TO-3PF	1	600	30	2	0.01	65	150	175
STTH6006TV	ISOTOP	2	600	2 x 30	1.4	0.025	50	210	150
STTH60L06C	TO-247	2	600	2 x 30	1.55	0.025	65	210	175
STTH60AC06C	TO-247,TO-247 long leads, TO-3PF	2	600	2 x 30	1.4	0.01	40	280	175
STTH60L06	DO-247	1	600	60	1.55	0.05	70	600	175
STTH60L06TV	ISOTOP	2	600	60	1.55	0.025	65	210	150
STTH6006W	DO-247	1	600	60	1.4	0.05	60	400	175
STTH60RQ06	DO-247,DO247 LONG LEADS	1	600	60	2.95	0.08	35	425	175
STTH80S06	DO-247	1	600	80	2.15	0.05	45	400	175
STTH100W06C	TO-247	2	600	2 x 50	1.65	0.02	75	360	175
STTH120L06TV	ISOTOP	2	600	2 x 60	1.55	0.05	70	500	150
STTH200L06TV	ISOTOP	2	600	2 x 100	1.55	0.08	80	800	150

800 V TO 1200 V ULTRAFAST RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V _F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
800 V									
STTH108	DO 41 PLASTIC, SMA	1	800	1	1.65	0.005	75	20	175
STTH208	DO-15, SMB	1	800	2	1.65	0.005	75	35	175
1000 V									
STTH110	DO 41 PLASTIC, SMA	1	1000	1	1.7	0.01	75	18	175
STTH310	DO-201AD, SMC	1	1000	3	1.7	0.01	75	45	175
STTH810	D ² PAK, TO-220AC, TO-220AC Ins, TO-220FPAC	1	1000	8	2	0.005	85	60	175
STTH1210	TO-220AC, TO-220AC Ins	1	1000	12	2	0.01	65	80	175
STTH3010	DO-247, DOP3 Ins, TO-220AC	1	1000	30	2	0.015	70	180	175
STTH6010	DO-247	1	1000	60	2	0.025	80	400	175
STTH6110TV	ISOTOP	2	1000	2 x 30	2	0.015	70	240	150
STTH12010TV	ISOTOP	2	1000	2 x 60	2	0.02	80	400	150
1200 V									
STTH112	DO 41 PLASTIC, SMA, SMB	1	1200	1	1.9	0.005	75	18	175
STTH212	SMB, SMC	1	1200	2	1.75	0.01	75	40	175
STTH512	DPAK, TO-220AC, TO-220FPAC	1	1200	5	2.2	0.005	70	55	175
STTH812	D ² PAK, TO-220AC, TO-220AC Ins, TO-220FPAC	1	1200	8	2.2	0.008	70	80	175
STTH8S12	TO-220AC	1	1200	8	2.5	0.005	45	70	175
STTH1212	TO-220AC	1	1200	12	2.2	0.01	70	100	175
STTH1512	D ² PAK, DO-247, DOP3 Ins	1	1200	15	2.1	0.015	75	200	175
STTH15S12	TO-220AC	1	1200	15	2.7	0.01	40	130	175
STTH3012	DO-247, TO-220AC	1	1200	30	2.25	0.02	80	210	175
STTH30S12	DO-247	1	1200	30	2.7	0.015	50	180	175

800 V TO 1200 V ULTRAFast RECTIFIERS

Part number	Package	Number of Diodes spec	Repetitive Peak Reverse Voltage	Average rectified current	V_F	Reverse Current	Reverse Recovery Time	Non-Repet Peak Forward Surge Current	Junction Temperature
			max (V)	max (A)	max (V)	max (mA)	max (ns)	max (A)	max (°C)
STTH6012	DO-247	1	1200	60	2.25	0.03	85	400	175
STTH75S12	DO-247	1	1200	75	2.7	0.05	55	370	175
STTH9012TV	ISOTOP	2	1200	2 x 45	2.1	0.03	85	420	150
STTH12012TV	ISOTOP	2	1200	2 x 60	2.25	0.03	125	420	150

Ordering information

STaa

Technology

STPS	Power Schottky
STPSC	SiC
STTH	Ultrafast
FERD	Field effect rectifier

bb

Current rating

Current:	0.5 A to 240 A
Code:	0.5 to 240

c

Series

For Schottky diodes (STPS)

Void	medium V_F/I_R
H	high temperature (<120 V only)
L	low V_F from $I_F/2$ to I_0 (<120 V only)
M	low V_F from $I_F/4$ to $I_F/2$
S	low leakage current
SM	low V_F up to $I_F/4$

For ultrafast diodes (STTH)

Void	medium V_F and Q_{rr}
L	low V_F (600 V mainly)
R	low Q_{rr} recovery
Nota: R trade-off mainly used for 400 V and 600 V	
-	AC à air conditioning
-	RQ à rapid and quiet
-	M -> more rapid & quiet

FERD

M	Low IR
SM	Medium V_F /IR
U	Ultra low V_F

ddd

Breakdown voltage

STPS (power Schottky)

code: $V_{RRM} = 15 \text{ V to } 600 \text{ V}$

STPSC (SiC)

code: $V_{RRM} = 600 \text{ V} / 1200 \text{ V}$
 H High surge
 Blank serie Low V_F

STTH (ultrafast)

code: V_{RRM} divided by 100
 200 V to 1200 V
 ▼ ▼
 02 to 12

FERD

Code $V_{RRM} = 45 \text{ V to } 100 \text{ V}$

Connection type

Void	two-lead configuration
C	dual common cathode
S	single in three-lead package

e

Packing type

Through-hole packages

Void	Axial: D0-41, D0-15, D0-201
D	TO-220AC
DI	TO-220I
T	TO-220AB
FP	TO-220FPAB
PI	DOP3I
R	I ² PAK
H	IPAK
W	TO-247, D0-247

SMD packages

A	SMA
U	SMB
S	SMC
B	DPAK
G	D ² PAK
TV1	ISOTOP (longitudinal)
TV2	ISOTOP (lateral)
DJF	Powerflat 5x6
DEE	Powerflat 3.3x3.3
AF	SMA Flat
UF	SMB Flat
SF	PSMC
DLF	Powerflat 8x8

f

g

Automotive grade

Void	standard diode
-Y	automotive-grade diode

Packing option

Void	for axial:bulk
Void	for SMA/B/C: tape and reel
Void	for other packages: tube
RL	tape and reel, for axial packages
TR	tape and reel, for other packages

Notes

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